

Patent Claims

- 5 1. Pearl essence-analogous pearlescent pigments prepared by enzymatic reaction of nucleosides and/or nucleotides with formation of the nucleobases in the form of flake-form crystals.
- 10 2. Process for the preparation of pearl essence-analogous pearlescent pigments according to Claim 1, characterised in that nucleosides and/or nucleotides are reacted enzymatically in one or more steps with formation of the nucleobases in the form of flake-form crystals.
- 15 3. Process according to Claim 2, characterised in that the nucleoside and/or nucleotide is a pyrimidine and/or purine nucleoside/nucleotide.
- 20 4. Process according to Claim 2 or 3, characterised in that the nucleoside and/or nucleotide comprises guanine and/or hypoxanthine.
- 25 5. Process according to one of Claims 2 to 4, characterised in that the enzymatic reaction is carried out by means of a hydrolase, a transferase or a fish scale extract.
- 30 6. Process according to one of Claims 2 to 5, characterised in that the enzymatic reaction is carried out with the enzymes naringinase, hesperidinase, nucleotidase, β -amylase, nucleosidase, inosinase, NAD-ase, pyrophosphate phosphoribosyl transferase, purine nucleoside phosphorylase or with a mixture thereof.
7. Process according to one of Claims 2 to 6, characterised in that the enzyme or enzyme mixture is metered in with decreasing enzyme units in a plurality of steps.

8. Process according to one of Claims 2 to 7, characterised in that surface-active substances are additionally added.
- 5 9. Process according to one of Claims 2 to 8, characterised in that gel-forming polymeric substances are additionally added.
10. Process according to one of Claims 2 to 9, characterised in that dyes are additionally added.
- 10 11. Use of pearl essence-analogous pearlescent pigments according to Claim 1 in paints, coatings, printing inks, plastics, cosmetic formulations, in the foods sector, in paper, in security materials, in agricultural sheeting, for colouring seed, for colouring foods or in medicament coatings, in dry preparations or in pigment preparations.
- 15 12. Paints, coatings, printing inks, plastics, cosmetic formulations, food products, paper, security materials, agricultural sheeting, seed, foods or medicaments, dry preparations or pigment preparations comprising pearl essence-analogous pearlescent pigments according to Claim 1.

20

25

30